

The Children's Research Initiative: Integrative Approaches (CRI)

Program Solicitation

NSF 01-85

DIRECTORATE FOR SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES
DIVISION OF BEHAVIORAL AND COGNITIVE SCIENCES

FULL PROPOSAL DEADLINE(S): June 4, 2001



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SUMMARY OF PROGRAM REQUIREMENTS

GENERAL INFORMATION

Program Title: The Children's Research Initiative: Integrative Approaches (CRI)

Synopsis of Program: The National Science Foundation is announcing a grants competition in the areas of children's research. Child development research needs to become more integrated in focus and draw relevant fields together for interdisciplinary collaborations (see Investing in our Future: A National Research Initiative for America's Children for the 21st Century. Executive Office of the President, OSTP, April 1997). The purpose of this solicitation is to inform the research community that support for developmental science will now receive added emphasis at the National Science Foundation via funding through the Children's Research Initiative (CRI) to support research centers and collaborations. This solicitation will also enable scientists to form research partnerships through planning or incubation grants, workshops, and small conferences in the areas of human sciences. It is important to expand research foci so that scientists can work together on problems that require larger-scale science from multiple perspectives. In recognition that some areas of human science need to be pursued on the smaller scale of individual research projects, however, NSF will also support individual investigator projects under this solicitation.

One funding opportunity is for collaborators to create research centers for purposes of conducting multidisciplinary, integrative research on scales larger than would be possible through individual research projects. Centers will provide rich environments that combine research perspectives from multi-disciplinary areas related to children's research. In addition to describing how their research frameworks will form a unifying set of research objectives, the centers will be required to show how they 1) enhance the content knowledge of the field; 2) build an intellectual infrastructure within and among disciplines; and 3) build a program of research in relevant aspects of developmental, learning, and human sciences.

A second funding opportunity for developing this area of emphasis will be to provide support for incubation or planning grants so that research groups can plan proposals that will enable them to conduct collaborative and large-scale, center research projects. Such planning grants are intended to help institutions build capacity and coordinate with potential collaborators.

In addition to planning grants and center grants, the current solicitation also welcomes proposals for workshops and small conferences that will enhance the purpose of this program; namely, to build capacity for integrative, multi disciplinary research in this area.

Fourth, individual investigators are also invited to submit standard research proposals that address the research issues related to the Children's Research Initiative.

Cognizant Program Officer(s):

- Dr. Rodney R. Cocking, Developmental & Learning Sciences, Program Director, Social, Behavioral, & Economic Sciences, Behavioral & Cognitive Sciences, 995, telephone: (703) 292-8732, e-mail: RCKOCKING@NSF.GOV.

Applicable Catalog of Federal Domestic Assistance (CFDA) Number(s):

- 47.075 --- Social, Behavioral and Economic Sciences

ELIGIBILITY INFORMATION

- **Organization Limit:** This solicitation may require the collaboration of different types of institutions and agencies involved in children's research. At least one partner must be an institution of higher learning and must have authorization to grant appropriate doctoral degrees. Other partners may include two- and four-year colleges and universities, state and local education agencies, professional societies, research laboratories, private foundations, informal science education centers, business and industry, and other public and private organizations (whether for profit or nonprofit).

For center proposals only, the awardee and lead institution must be a doctoral degree-granting institution.

- **PI Eligibility Limit:** None
- **Limit on Number of Proposals:** None

AWARD INFORMATION

- **Anticipated Type of Award:** Standard or Continuing Grant
- **Estimated Number of Awards:** See Section IV, Award Information
- **Anticipated Funding Amount:** \$5M in FY 2001, subject to the availability of funds

PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

- **Full Proposals:** Deviations From Standard Preparation Guidelines
 - The program announcement/solicitation contains deviations from the standard Grant Proposal Guide (GPG) proposal preparation guidelines. Please see the full program announcement/solicitation for further information.

B. Budgetary Information

- **Cost Sharing Requirements:** Cost Sharing is Specialized. Please see the full program solicitation for further information.
- **Indirect Cost (F&A) Limitations:** None.
- **Other Budgetary Limitations:** Other budgetary limitations apply. Please see the full program announcement/solicitation for further information.

C. Deadline/Target Dates

- **Letters of Intent (*optional*):** None
- **Preliminary Proposals (*optional*):** None
- **Full Proposal Deadline Date(s):** June 4, 2001

D. FastLane Requirements

- **FastLane Submission:** Full Proposal Required
- **FastLane Contact(s):**
 - BCSFASTLANE@NSF.GOV.

PROPOSAL REVIEW INFORMATION

- **Merit Review Criteria:** National Science Board approved criteria. Additional merit review considerations apply. Please see the full program announcement/solicitation for further information.

AWARD ADMINISTRATION INFORMATION

- **Award Conditions:** Standard NSF award conditions apply.
- **Reporting Requirements:** Standard NSF reporting requirements apply.

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I. INTRODUCTION

The National Science Foundation is announcing a grants competition in the areas of children's research. The purpose of this solicitation is to inform the research community that support for integrative research will now receive added emphasis via additional funding through the Children's Research Initiative (CRI).

Funding under this CRI program will support large-scale center-based research. The complexity of children's research may require discussion, planning, and consensus building for successful implementation of large-scale, integrative research projects. Incubation or planning grants, as well as workshops and small conferences, will be made to help groups of researchers articulate their shared visions and goals for advancing such research. Support is also available for scientists who are currently ready to establish research coalitions.

One funding opportunity is for collaborators to create research centers for purposes of conducting multidisciplinary, integrative research on scales larger than might be possible through individual research projects. Centers will provide rich environments that combine research perspectives from multi-disciplinary areas related to children's research. The centers will be required to show how they 1) enhance the content knowledge of the field; 2) build an intellectual infrastructure within and among disciplines; and 3) build a program of research in relevant aspects of developmental, learning, and human sciences.

A second funding opportunity for developing this area of emphasis will be to provide support for incubation or planning grants so that research groups can plan proposals that will enable them to conduct collaborative and large-scale, center research projects. Such planning grants are intended to help institutions build capacity and coordinate with potential collaborators.

In addition to planning grants and center grants, the current solicitation also welcomes proposals for workshops and small conferences that will enhance the purpose of this program; namely, to build capacity for integrative, multidisciplinary research in this area.

Fourth, individual investigators are also invited to submit standard research proposals that address the research issues related to the Children's Research Initiative (see Investing in our Future: A National Research Initiative for America's Children for the 21st Century. Executive Office of the President, OSTP, April 1997, <http://www.ostp.gov/children/index.html> and NSF Program Announcement: NSF-01-46). It is recognized that some areas are not yet ready for large scale or multiple-investigator research approaches and for this reason, the present solicitation will accept proposals from individual investigators.

For all four types of activities under this solicitation, highest priority will be given to proposals from human sciences units in institutions of higher education that have an interdisciplinary academic program in human and family development, nutrition, and related areas. A strong emphasis will be placed on theory-driven, applied, policy-related research on children, learning, and the influences of families and communities on children's development. Proposals also will be evaluated for their effectiveness in utilizing existing delivery systems for program outreach and evaluation and to assess how the implementation of research findings can benefit the majority of all children in a given state or region.

The Collaboration Concept

Incubation or planning grants are not a requirement for submitting a center proposal. They are intended to help institutions develop the necessary infrastructure within and among disciplines in order to compete successfully for a center by supporting the necessary planning activities for weaving together knowledge creation, knowledge integration, and knowledge transfer.

Collaborators will plan world-class research programs through partnerships across disciplines, academic institutions, research laboratories, industrial organizations, and/or other public and private entities.

These collaborations need to foster and enable excellent education, integrate research and education, and fully support development of the field of children's research. New knowledge thus created is meaningfully linked to society.

The collaborating entities must capitalize on diversity through center activities and demonstrate involvement of groups underrepresented in children's research.

Developmental and Learning Sciences Program Objectives

The Directorate for Social, Behavioral and Economic Sciences (SBE) at the National Science Foundation has a history of supporting basic research in cognitive, affective, and social psychology and linguistics, largely through the Programs of the Behavioral and Cognitive Sciences (BCS) Division. Additional support has been provided through programs in the Directorate for Education and Human Resources.

Studies of cognitive, affective, linguistic, and social behaviors have contributed to scientific understanding of the mechanisms underlying development and learning. Research studies in these disciplines have produced many important and insightful theories of behavior and development, and have contributed to a substantial knowledge base about developmental processes. With the extensive knowledge bases that exist in these research domains, it is now time to look at the complex and interactive systems of human development and to consider research on scales larger than single-investigator studies or small projects.

The central objective of the Developmental and Learning Sciences Program (see Announcement NSF-01-46) is to encourage research that focuses on mechanisms of development and learning that help to explain when and how children and adolescents acquire new knowledge and skills. Similarly, center-based research and collaborations may be funded on a wide range of topics, as indicated in the listing of priorities in the Program Announcement for Developmental and Learning Sciences; however, studies must be linked clearly to a central mission. The objective of developing centers and research collaborations is to accomplish integrative science by supporting multiple components from contributing collaborators.

II. PROGRAM DESCRIPTION

THE CENTERS PROGRAM FOR THE CHILDREN'S RESEARCH INITIATIVE

Research on children has been conducted traditionally in terms of disparate processes (e.g., perception, action, memory), separate levels (e.g., behavioral, social, neural), and different time scales (development, learning, action), all largely within separate subdisciplines. However, the

complexity underlying behavior requires unified explanations, which current and developing tools and technologies of science are now making possible. These explanations should integrate across traditional knowledge domains and levels of analysis. The requirements for such research are at the scale of (1) development, plasticity, adaptation, and social, interpersonal, and family experiences; (2) enduring effects; (3) conceptual frameworks and mathematical models for systems descriptions; (4) different levels of the nervous system, (5) coherence among multiple system component parts; (6) social and evolutionary perspectives; and (7) experience/statistics of neural tuning and its relationship to behavior. Although any single research project is unlikely to incorporate all of the above issues, research on complex systems has the goal of integrating at least subsets of these issues.

Research on children needs to become more integrated in focus and draw relevant fields together for interdisciplinary collaborations. This solicitation is to assist scientists in forming partnerships to work together. It is important for basic researchers to work together on problems that cannot be solved through single investigator studies. Fields such as cognitive science and neuroscience, for example, have made important advances through their joint efforts.

The research areas relevant to children's development are broad, including cognitive development, cognitive science, developmental psychology, linguistics, neuroscience, anthropology, social psychology, sociology, family studies, cross-cultural research, and environmental psychology, to name only some of the disciplines. These areas have been broadened further with the advent of technology as a mediator of learning. Interactive technologies have broadened learning and understanding by expanding opportunities for learning-by-doing, expanding the connections among learners and between learners and mentors in distance learning, by expanding information sources through internet digital libraries, and by expanding learning techniques and tools that enable one to visualize and model complex concepts. In short, technology has important linkages with each of the disciplines of developmental and learning sciences.

The need, now, is to generate new approaches to research on complex human systems that impact learning and development by studying the contexts of human development, ecological factors, and a variety of interactive phenomena that impact human growth and development. Since there is presently a diversity of methodologies across the separate research disciplines that comprise human developmental sciences, there is a need to focus on ways to integrate qualitative and quantitative methods across the sciences.

There is also a need to develop mechanisms to make collaborations and data sharing easier among researchers. National databases and longitudinal studies can foster interdisciplinary collaborations and uses of cross-disciplinary data, promote broader exploration of testable questions across datasets, increase the quality of data by maintaining accurate and uniform records, and promote cost-effectiveness through the sharing of research data. Furthermore, national databases that are built from representative samples of the changing national population have the potential to broaden the scope and power of research findings.

Centers will be required to demonstrate a unifying research focus involving relevant areas of children's research that are supported by the National Science Foundation (see Program Announcement NSF-01-46). Centers may vary in size and exhibit diverse forms of organization. No single type of center fits the needs of every group of collaborators. Rather, the size, structure,

and operation of a Children's Research Initiative center will be determined by the proposed research, education, and knowledge transfer activities. While each center will be unique in some respects, each must meet the following requirements:

- Be based in a doctoral degree-granting academic institution;
- Be directed by a faculty member and integrated into the academic programs;
- Reflect commitment to achieving strategic goals shared by the host and partnering institutions as demonstrated by institutional commitments;
- Provide a variety of education and research opportunities for U.S. students and faculty (e.g., undergraduate and graduate students, postdoctoral researchers, students from groups underrepresented in human sciences, K-12 teachers, and visiting participants);
- Have significant intellectual exchange and resource linkages among various collaborators to facilitate knowledge transfer (e.g., colleges and universities such as minority-serving institutions, community colleges, EPSCoR institutions, research laboratories, etc.);
- Include career broadening experiences as appropriate to the research areas (e.g., industrial, national or international laboratory internships, etc);
- Include a management plan for monitoring the center's activities; and

Any institution or a group of institutions that fulfills the preceding requirements may submit a proposal for a center grant. Minority-serving, rural, and comprehensive institutions of higher education that have faculty and researchers in areas of developmental sciences are encouraged to submit proposals.

PLANNING GRANTS, WORKSHOPS, AND SMALL CONFERENCES

Recognizing that the creation of collaborations takes some time, this competition includes incubation or planning grants. The goal of these grants is to seed collaborations that lead to the formation of teams of scientists from several disciplines. Planning grants will be awarded to institutions or research organizations that require a planning period to develop solid collaborations and/or strengthen institutional capacities, to assess research needs, or to prepare for a special focus. Planning grants will be awarded on a one-time basis, and it is anticipated that each may result in the submission of a full proposal in future competitions. The core purpose of a planning grant is to develop institutional capacity and partnerships. However, a planning grant is not a requirement for submitting a center grant proposal.

Workshops and small conferences are two additional mechanisms available for assessing the research needs of the field and for planning ways to address research gaps. Workshop and conference meetings are intended to bring researchers together to evaluate extant research and ways to address unmet needs of the field. Workshop and conference proposals will be awarded on a one-time basis.

INDIVIDUAL INVESTIGATOR RESEARCH PROJECTS

Individual investigator proposals will be accepted for CRI research projects. Projects must be relevant to areas of research supported by the National Science Foundation (see Program Announcement NSF-01-46).

Priority will be given to studies addressing one or more of the following:

- Fundamental research on developmental processes during the perinatal and prenatal periods, infancy, childhood, adolescence, and young adulthood.
- Studies of the relationships among biological, ecological, contextual cognitive, linguistic, social, and emotional aspects of human learning and development over the life course.
- Brain processes in learning, including developmental cognitive neuroscience on how children learn, brain adaptability, and the roles of experience, ecological, contextual, and environmental factors that stimulate learning.
- Relationships among learning, creativity, and intelligence.
- Higher-order processes of learning, including critical thinking, communication, memory, language, mental representation, and other cognitive processes that maximize learning potential.
- Uses of technology to nurture children's learning and creative abilities, including the role of multimedia technologies on children's development.
- Relations between the development of specific and general forms of knowledge; age-related changes in the processes of transfer of knowledge in one domain to children's understanding of another domain.
- Multidisciplinary, multi-method, microgenetic, and longitudinal approaches to the study of learning and development during childhood and adolescence, including ethnographic research.
- Development of new methods, models, and theories for studying human development.
- Relations of children's and adolescents' learning to peer relationships, family interactions, social identities, and motivation.
- Studies of the multiple influences on children's learning and development, including the impact of family, school, community resources, and social institutions on the learning and development of children and adolescents.
- Research on how learning is mediated by peers, social institutions, the media, and popular culture.
- Relations of adolescents' learning and development to their preparation for entry into the workforce.
- The role of cultural influences and demographic characteristics (e.g., children's socioeconomic status, ethnicity, immigrant status, gender) on children's learning and development. The role of culture as internal processes (e.g., value perspectives, construction of meaning, etc.)

As indicated in the above listing of priorities, basic research may be funded on a wide range of topics; however, studies must be clearly linked to the primary objective of understanding problems in the areas of children's research.

Individuals who are eligible for the Faculty Early Career Development Program are encouraged to review program announcement NSF 00-89.

III. ELIGIBILITY INFORMATION

The categories of proposers identified in the [Grant Proposal Guide](#) are eligible to submit proposals under this program announcement/solicitation.

For center grant applicants only, the submitting and lead institution must be a doctoral degree-granting institution.

IV. AWARD INFORMATION

Estimated program budget, number of awards and average award size/duration are subject to the availability of funds.

The purpose of this solicitation is to support large-scale center-based research. The complexity of children's research may require discussion, planning, and consensus building for successful implementation of large-scale, integrative research projects. Incubation or planning grants, as well as workshops and small conferences, will be made to help groups of researchers articulate their shared visions and goals for advancing such research. Support is also available for scientists who are currently ready to establish research coalitions. The following different types of grant mechanisms will be available:

Center Grants

- . Anticipated Type of Award: Continuing grants (3-5 years)
- . Estimated Number of Awards: 3 awards, up to \$500,000 per annum per award

Planning Grants

- . Anticipated Type of Award: Standard grants (6-9 months)
- . Estimated Number of Awards: 8-10 awards, up to \$75,000-\$100,000 each

Workshops and Small Conferences

- . Anticipated Type of Award: Standard grants (6-9 months)
- . Estimated Number of Awards: 5 - 8, up to \$10,000-\$15,000 each

Individual Investigator Awards

- . Anticipated Type of Award: Standard or continuing grants (up to 5 years)
- . Estimated Number of Awards: 10 - 15, up to \$75,000-\$120,000 per annum per award

Anticipated Funding Amount: Approximately \$5 million for center grants, planning grants, workshops, small conferences, and individual investigator grants in FY2001, pending availability of funding.

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Full Proposal:

Proposals submitted in response to this program announcement/solicitation should be prepared and submitted in accordance with the general guidelines contained in the NSF *Grant Proposal Guide* (GPG). The complete text of the GPG is available electronically on the NSF Web Site at: <http://www.nsf.gov/cgi-bin/getpub?nsf012>. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (301) 947-2722 or by e-mail from pubs@nsf.gov.

The project description for a center proposal should not exceed 15 pages, but may include up to 5 additional pages for describing plans for monitoring the center's activities. The description should consider the following: 1) the need addressed; 2) evidence that the institutional capacity has been enhanced; 3) documentation that partnerships have been established and/or strengthened; 4) reports on the individual science projects supported by center activities.

Planning grants, workshops, and conference project descriptions must not exceed 10 pages and should include all information relating to the project. The description should consider the following: 1) the need addressed; 2) evidence that the institutional capacity has been enhanced; and 3) documentation that partnerships have been established and/or strengthened. Workshops and conferences will include 1) a description of the needs addressed; 2) proposed solutions for addressing the needs; 3) meeting agenda and list of participants who attended the meeting; 4) consensus document that presents a research agenda and recommendations for future research in the area(s) addressed.

Individual investigator proposals should follow the proposal preparation guidelines as outlined in the Grant Proposal Guide (GPG).

Proposers are reminded to identify the program solicitation number (NSF 01-85) in the program announcement/solicitation block on the proposal Cover Sheet (NSF Form 1207). Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.

B. Budgetary Information

Cost-sharing of 10% of the total costs(direct plus indirect)requested from NSF is required on center proposals only.

The proposed cost sharing must be shown on Line M on the proposal budget. Documentation of the availability of cost sharing must be included in the proposal. Only items which would be allowable under the applicable cost principles, if charged to the project, may be included as the awardee's contribution to cost sharing. Contributions may be made from any non-Federal source, including non-Federal grants or contracts, and may be cash or in-kind (see OMB Circular A-110, Section 23). It should be noted that contributions counted as cost-sharing toward projects of another Federal agency may not be counted towards meeting the specific cost-sharing requirements of the NSF award. All cost-sharing amounts are subject to audit. Failure to provide the level of cost-sharing reflected in the approved award budget may result in termination of the NSF award, disallowance of award costs and/or refund of award funds to NSF.

Indirect Cost (F&A) Limitations: None.

Other Budgetary Limitations: Center proposals may request up to \$500,000 of NSF support annually for 3-5 years. Center Directors may be asked to meet in Washington for an annual Center Directors' conference. Expenses to travel to this meeting should be included in centers' annual budgets.

Planning grants are anticipated to have budgets (total costs, including indirect costs) in the \$75,000 to \$100,000 range, depending upon the extent of the development needed, the number of institutions involved, and the scope and/or complexity of the needs addressed. Planning grant budgets that exceed these amounts that are well-justified will be considered. Support is available for, but not limited to: staff release time, consultants' fees, travel, computer network time, and related costs. Planning grants will be made for a period of 6-9 months.

Workshops and small conferences are anticipated to have budgets (total costs, including indirect costs) in the \$10,000 to \$15,000 range, depending upon the size of the meeting. Budgets that exceed these amounts that are well-justified will be considered. Support is available for, but not limited to: staff release time, consultants' fees, travel, computer network time, and related costs. Workshop and conference grants will be made for a period of 6-9 months.

Individual Investigator projects are anticipated to have annual budgets (total costs) in the \$75,000 to \$120,000 range, depending upon the research requirements. Annual budgets that exceed these amounts that are well-justified will be considered. Research support can be requested for up to 5 years' duration. Support is available for, but not limited to: staff release time, consultants' fees, travel, computer network time, research costs, and related costs for materials and supplies.

C. Deadline/Target Dates

Proposals must be submitted by the following date(s):

Full Proposals by 5:00 PM local time: June 4, 2001

D. FastLane Requirements

Proposers are required to prepare and submit all proposals for this Program Solicitation through the FastLane system. Detailed instructions for proposal preparation and submission via FastLane are available at: <http://www.fastlane.nsf.gov/a1/newstan.htm>. For FastLane user support, call 1-800-673-6188.

Submission of Signed Cover Sheets. The signed copy of the proposal Cover Sheet (NSF Form 1207) must be postmarked (or contain a legible proof of mailing date assigned by the carrier) within five working days following proposal submission and be forwarded to the following address:

**National Science Foundation
DIS – FastLane Cover Sheet
4201 Wilson Blvd.
Arlington, VA 22230**

VI. PROPOSAL REVIEW INFORMATION

A. NSF Proposal Review Process

Reviews of proposals submitted to NSF are solicited from peers with expertise in the substantive area of the proposed research or education project. These reviewers are selected by Program Officers charged with the oversight of the review process. NSF invites the proposer to suggest at the time of submission, the names of appropriate or inappropriate reviewers. Care is taken to ensure that reviewers have no conflicts with the proposer. Special efforts are made to recruit reviewers from non-academic institutions, minority-serving institutions, or adjacent disciplines to that principally addressed in the proposal.

Proposals will be reviewed against the following general review criteria established by the National Science Board. Following each criterion are potential considerations that the reviewer may employ in the evaluation. These are suggestions and not all will apply to any given proposal. Each reviewer will be asked to address only those that are relevant to the proposal and for which he/she is qualified to make judgements.

What is the intellectual merit of the proposed activity?

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of the prior work.) To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

What are the broader impacts of the proposed activity?

How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

Principal Investigators should address the following elements in their proposal to provide reviewers with the information necessary to respond fully to both of the above-described NSF merit review criteria. NSF staff will give these elements careful consideration in making funding decisions.

Integration of Research and Education

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learning perspectives.

Integrating Diversity into NSF Programs, Projects, and Activities

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

Additional Review Criteria

PIs must also address the following elements in their planning grant and center grant proposals:

1. Value of the Collaborative and Center-Mode to Research, Education, and Knowledge Transfer

Are the science and research challenges of sufficient import, scale, and complexity to justify a collaboration or center-mode investment? Will the partnerships achieve significant intellectual exchange? Will any proposed new instruments, shared experimental facilities, and/or databases be of significant value to a broad community of users? Will the educational programs make a special contribution to the achievement of a diverse, highly competent, and globally-engaged workforce and of an educated citizenry?

2. Integrative Nature of the Proposed Center

Are research, educational, and knowledge transfer activities strategically integrated such that the whole is greater than the sum of the parts? Are the partners vital participants in an integrated whole?

3. Leadership

Do the center director and the center leadership team convincingly demonstrate the vision, experience, and capacity to manage a complex, multi-faceted, and innovative research, education, and knowledge transfer enterprise?

A summary rating and accompanying narrative will be completed and signed by each reviewer. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the names of the reviewers, are sent to the Principal Investigator/Project Director by the Program Director. In addition, the proposer will receive an explanation of the decision to award or decline funding.

B. Review Protocol and Associated Customer Service Standard

All proposals are carefully reviewed by at least three other persons outside NSF who are experts in the particular field represented by the proposal. Proposals submitted in response to this announcement/solicitation will be reviewed by Mail and/or panel review.

Reviewers will be asked to formulate a recommendation to either support or decline each proposal. The Program Officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation.

NSF will be able to tell applicants whether their proposals have been declined or recommended for funding within six months for 95 percent of proposals. The time interval begins on the proposal deadline or target date or from the date of receipt, if deadlines or target dates are not

used by the program. The interval ends when the Division Director accepts the Program Officer's recommendation.

In all cases, after programmatic approval has been obtained, the proposals recommended for funding will be forwarded to the Division of Grants and Agreements for review of business, financial, and policy implications and the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants and Agreements Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with a NSF Program Officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants and Agreements Officer does so at its own risk.

VII. AWARD ADMINISTRATION INFORMATION

A. Notification of the Award

Notification of the award is made to *the submitting organization* by a Grants Officer in the Division of Grants and Agreements. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program Division administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator. (See section VI.A. for additional information on the review process.)

B. Award Conditions

An NSF award consists of: (1) the award letter, which includes any special provisions applicable to the award and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which NSF has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal referenced in the award letter; (4) the applicable award conditions, such as Grant General Conditions (NSF-GC-1)* or Federal Demonstration Partnership (FDP) Terms and Conditions * and (5) any announcement or other NSF issuance that may be incorporated by reference in the award letter. Cooperative agreement awards also are administered in accordance with NSF Cooperative Agreement Terms and Conditions (CA-1). Electronic mail notification is the preferred way to transmit NSF awards to organizations that have electronic mail capabilities and have requested such notification from the Division of Grants and Agreements.

*These documents may be accessed electronically on NSF's Web site at http://www.nsf.gov/home/grants/grants_gac.htm. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (301) 947-2722 or by e-mail from pubs@nsf.gov.

More comprehensive information on NSF Award Conditions is contained in the NSF *Grant Policy Manual* (GPM) Chapter II, available electronically on the NSF Web site at <http://www.nsf.gov/cgi-bin/getpub?gpm>. The GPM is also for sale through the Superintendent of Documents, Government Printing Office (GPO), Washington, DC 20402. The telephone number at GPO for subscription information is (202) 512-1800. The GPM may be ordered through the GPO Web site at <http://www.gpo.gov>.

C. Reporting Requirements

For all multi-year grants (including both standard and continuing grants), the PI must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period.

Within 90 days after the expiration of an award, the PI also is required to submit a final project report. Approximately 30 days before expiration, NSF will send a notice to remind the PI of the requirement to file the final project report. Failure to provide final technical reports delays NSF review and processing of pending proposals for that PI. PIs should examine the formats of the required reports in advance to assure availability of required data.

NSF has implemented an electronic project reporting system, available through FastLane. This system permits electronic submission and updating of project reports, including information on project participants (individual and organizational), activities and findings, publications, and other specific products and contributions. PIs will not be required to re-enter information previously provided, either with a proposal or in earlier updates using the electronic system.

VIII. CONTACTS FOR ADDITIONAL INFORMATION

General inquiries regarding The Children's Research Initiative: Integrative Approaches should be made to:

- Dr. Rodney R. Cocking, Developmental & Learning Sciences, Program Director, Social, Behavioral, & Economic Sciences, Behavioral & Cognitive Sciences, 995, telephone: (703) 292-8732, e-mail: RCKOCKING@NSF.GOV.

For questions related to the use of FastLane, contact:

- BCSFASTLANE@NSF.GOV.

IX. OTHER PROGRAMS OF INTEREST

The NSF *Guide to Programs* is a compilation of funding for research and education in science, mathematics, and engineering. The NSF *Guide to Programs* is available electronically at <http://www.nsf.gov/cgi-bin/getpub?gp>. General descriptions of NSF programs, research areas, and eligibility information for proposal submission are provided in each chapter.

Many NSF programs offer announcements or solicitations concerning specific proposal requirements. To obtain additional information about these requirements, contact the appropriate NSF program offices. Any changes in NSF's fiscal year programs occurring after press time for the *Guide to Programs* will be announced in the NSF [E-Bulletin](#), which is updated daily on the NSF web site at <http://www.nsf.gov/home/ebulletin>, and in individual program announcements/solicitations. Subscribers can also sign up for NSF's [Custom News Service](#) (<http://www.nsf.gov/home/cns/start.htm>) to be notified of new funding opportunities that become available.

ABOUT THE NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) funds research and education in most fields of science and engineering. Awardees are wholly responsible for conducting their project activities and preparing the results for publication. Thus, the Foundation does not assume responsibility for such findings or their interpretation.

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Facilitation Awards for Scientists and Engineers with Disabilities (FASSED) provide funding for special assistance or equipment to enable persons with disabilities (investigators and other staff, including student research assistants) to work on NSF-supported projects. See the program announcement/solicitation for further information.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Information Relay Service (FIRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation about NSF programs, employment or general information. TDD may be accessed at (703) 292-5090, FIRS at 1-800-877-8339.

The National Science Foundation is committed to making all of the information we publish easy to understand. If you have a suggestion about how to improve the clarity of this document or other NSF-published materials, please contact us at plainlanguage@nsf.gov.

PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to applicant institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies needing information as part of the review process or in order to coordinate programs; and to another Federal agency, court or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 63 Federal Register 267 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

Pursuant to 5 CFR 1320.5(b), an agency may not conduct or sponsor, and a person is not required to respond to an information collection unless it displays a valid OMB control number. The OMB control number for this collection is 3145-0058. Public reporting burden for this collection of information is estimated to average 120 hours per response, including the time for reviewing instructions. Send comments regarding this burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to: Suzanne Plimpton, Reports Clearance Officer, Information Dissemination Branch, Division of Administrative Services, National Science Foundation, Arlington, VA 22230, or to Office of Information and Regulatory Affairs of OMB, Attention: Desk Officer for National Science Foundation (3145-0058), 725 17th Street, N.W. Room 10235, Washington, D.C. 20503.

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